

THE SPIDER GENERA *CEROCIDA*, *HETSCHKIA*,
WIRADA AND *CRASPEDISIA*
(ARANEAE: THERIDIIDAE)*

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The four genera discussed in this paper are known only from tropical America. No species have been found in other parts of the world. All are small genera with one or two known species. The characters that distinguish the genera have been discussed in a previous paper (Levi and Levi, 1962), in which were illustrated the type species. For ease of comparison the type species are figured here again with some new drawings. Drawings of the expanded palpi are omitted.

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Cerocida Simon

Cerocida Simon, 1894, Histoire Naturelle des Araignées, 1: 508. Type species by original designation and monotypy: *C. strigosa* Simon, 1894.

Cephalothorax with posterior stalk and raised reticulate pattern in both sexes (Fig. 6). Legs long, first patella and tibia as long or slightly longer than carapace. Abdomen small, higher than long; male with sclerotized rings around pedicel and spinnerets (Fig. 1). Colulus replaced by two setae, unlike the related *Helvibis*, which lacks setae.

Cerocida strigosa Simon

Figures 1-6

Cerocida strigosa Simon, 1894, Histoire Naturelle des Araignées, 1: 508, fig. 510. Female holotype from Venezuela in the Muséum National d'Histoire Naturelle, Paris, examined.

*Manuscript received by the editor February 19, 1963.

Note. Since this specimen was presumably collected by Simon, the type locality can be narrowed to the limited northern areas of Venezuela, Caracas, and the states Aragua and Carabobo, through which Simon travelled.

Description. Carapace, sternum light brown; legs yellow-white; abdomen whitish; male darker than female and more heavily sclerotized. Carapace and sternum fused between coxae and around pedicel; both with a reticulate raised pattern and raised rings around pedicel. Female pedicel stalk slightly shorter than that of male (Fig. 6). Anterior median eyes two-thirds the diameter of posterior median eyes, their radius apart, almost touching laterals. Posterior median eyes of female one-third diameter apart, their radius from laterals. Posterior median eyes of male one-quarter diameter apart, one diameter from laterals. Chelicerae apparently with one large tooth on anterior margin. Abdomen higher than long with few long setae (Figure 1). Male abdomen with sclerotized ring around pedicel and sclerotized ring around spinnerets. Total length of female 1.5 mm. Carapace 0.80 mm long, 0.53 mm wide. First femur, 0.87 mm; patella and tibia, 0.92 mm; metatarsus, 0.57 mm; tarsus, 0.46 mm. Second patella and tibia, 0.66 mm; third, 0.50 mm; fourth, 0.71 mm. Total length of male 1.7 mm. Carapace 0.93 mm long, 0.55 mm wide. First femur, 1.06 mm; patella and tibia, 1.05 mm; metatarsus, 0.62 mm; tarsus, 0.46 mm. Second patella and tibia, 0.78 mm; third, 0.55 mm; fourth, 0.82 mm.

The genitalia are small, transparent (Fig. 3-5), and difficult to study in the few specimens available.

The descriptions and illustrations were made from British Guiana specimens.

Natural History. Specimens have been collected by sifting litter. This species is probably an ant mimic.

Record. *British Guiana.* Kartabo, 1924, 1 ♀, 1 ♂ (AMNH).

Hetschkia Keyserling

Hetschkia Keyserling, 1886, *Die Spinnen Amerikas*, Theridiidae, 2(2):246.

Type species by monotypy: *H. gracilis* Keyserling.

Carapace sclerotized, suboval with a posterior stalk in both sexes (Figs. 11, 12). Carapace of male wider than that of female. Abdomen suboval, without colulus.

The carapace shape distinguishes the genus from *Theridion*, the short embolus and female connecting ducts from *Helvibis*.

Hetschkia gracilis Keyserling

Figures 7-13

Hetschkia gracilis Keyserling, 1886, Die Spinnen Amerikas, Theridiidae, 2(2):247, pl. 20, fig. 299, ♂. Male holotype from Blumenau, [Santa Catarina], Brazil in the Muséum National d'Histoire Naturelle, Paris, examined.

Description. Female. Carapace, sternum yellow. Legs yellow with tarsi brown and anterior side of each patella with a black spot. Abdomen whitish, unpigmented. Carapace sclerotized, slightly granulate, almost smooth. Sternum fused to carapace but with seam present above coxae. Carapace and sternum fused around pedicel (Fig. 7). Eyes subequal in size. Anterior median eyes one and one-half diameters apart, their radius from laterals. Posterior median eyes two diameters apart, one and one-half diameters from laterals. Abdomen spherical. Total length of female from São Paulo 2.2 mm. Carapace 1.20 mm long, 0.61 mm wide. First femur, 1.32 mm; patella and tibia, 1.21 mm; metatarsus, 1.19 mm; tarsus, 0.45 mm. Second patella and tibia, 0.90 mm; third, 0.62 mm; fourth, 0.90 mm.

Figures 12 and 13 were prepared from the holotype.

Records. Brazil. São Paulo: Botanical Gardens, São Paulo, 13-17 Jan. 1959, 2 ♀ (A. M. Nadler, AMNH). Santa Catarina: Blumenau, ♀ with ♂ holotype (MNHN).

Wirada Keyserling

Wirada Keyserling, 1886, Die Spinnen Amerikas, Theridiidae, 2(2):25. Type species by monotypy: *W. punctata* Keyserling.

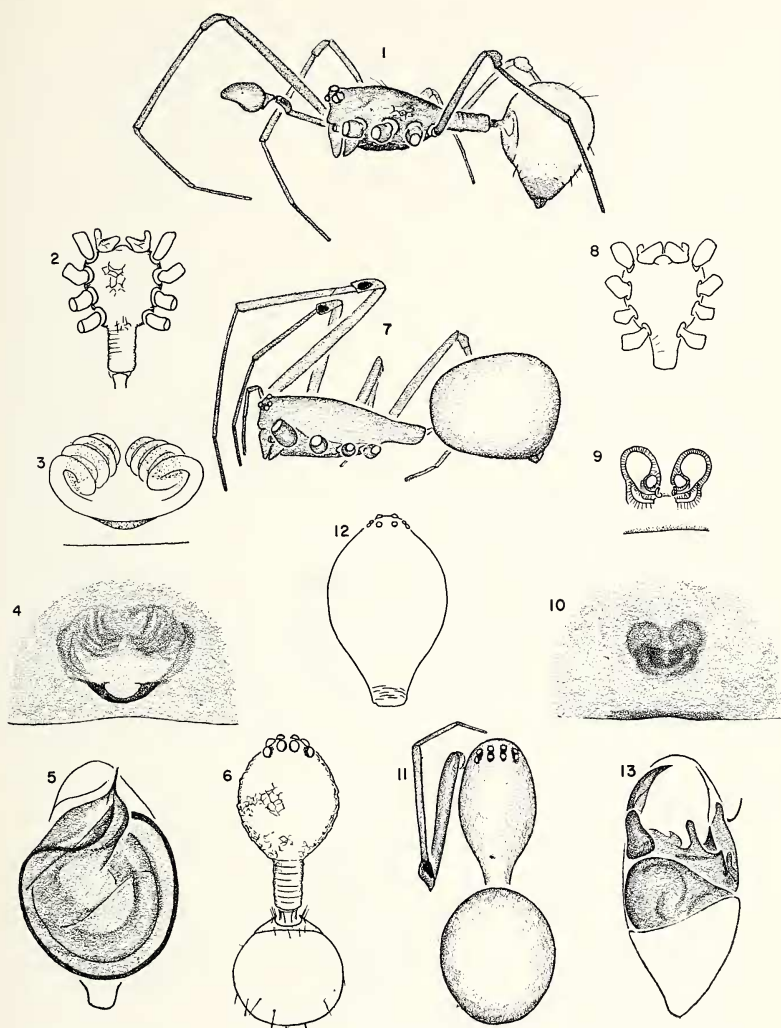
Carapace with eye region projecting and clypeus sloping back toward chelicerae. Carapace and sternum tuberculate (Figs. 18, 25, 26). Legs short; leg four about equal to leg one. Tarsi longer than metatarsi. Abdomen with a dorsal sclerotized shield, a large shield surrounds pedicel and a sclerotized ring around spinnerets (Figs. 24, 25). Colulus replaced by two setae.

The tuberculate carapace resembles that of *Crustulina*; *Wirada*, however, lacks the distal process on the palpal cymbium and lacks a large colulus. The relatively simple palpus and long tarsi make *Wirada* resemble spiders placed in the family Symphytognathidae. *Wirada* species, like members of the latter family, have tarsi longer

EXPLANATION OF PLATE 17

Figs. 1-6. *Cerocida strigosa* Simon. 1. Male. 2. Male sternum and coxae. 3. Female genitalia, dorsal view. 4. Epigynum. 5. Left palpus. 6. Male.

Figs. 7-13. *Hetschkia gracilis* Keyserling. 7. Female. 8. Female sternum and coxae. 9. Female genitalia, dorsal view. 10. Epigynum. 11. Female. 12. Male carapace. 13. Palpus.



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than metatarsi, and may lack lungs, but lack teeth on the posterior margin of the chelicerae.

Wirada punctata Keyserling

Figures 14-18

Wirada punctata Keyserling, 1886, Die Spinnen Amerikas, Theridiidae, 2(2):26, pl. 11, fig. 147, ♂. Male holotype from Montaña di Nancho, [? Cajamarca], Peru, 8000 m elev., in the Polish Academy of Sciences, Warsaw, examined.

Wirada rugithorax Simon, 1894, Histoire Naturelle des Araignées, 1:585, nom. nudum; 1895, Ann. Soc. ent. France, 64:148. Male holotype from San Esteban, [Carabobo], Venezuela in the Muséum National d'Histoire Naturelle, Paris, examined. NEW SYNONYM

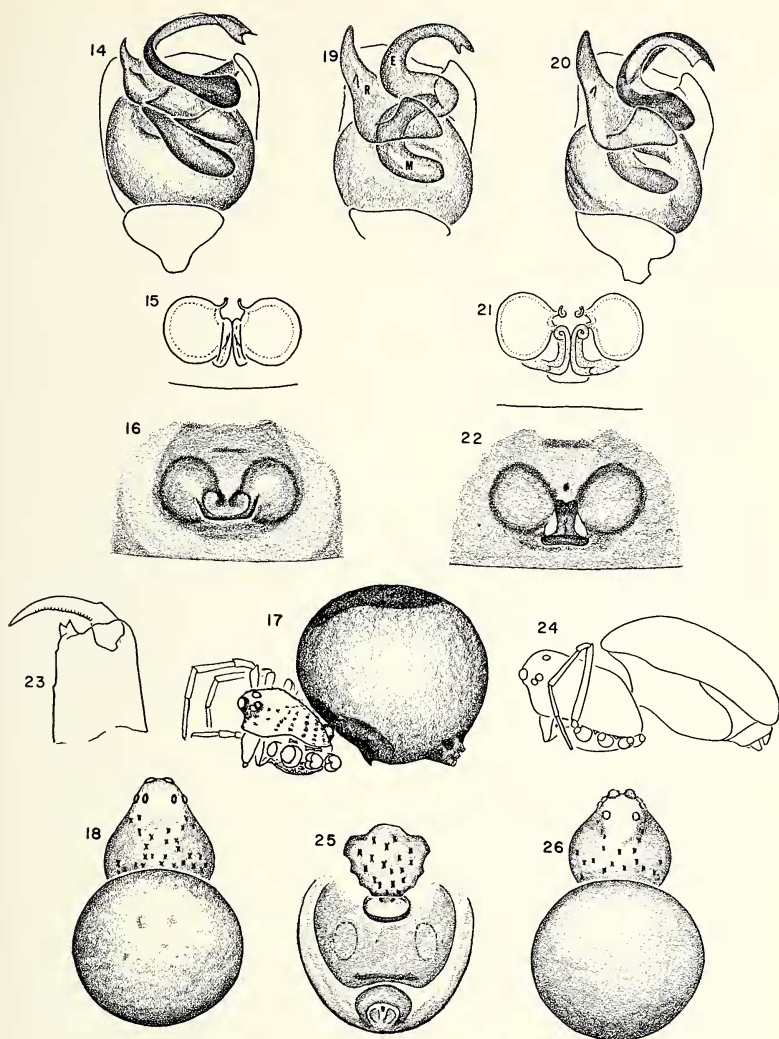
Description. Male. Sclerotized areas dark, rich red-brown. Legs and lightly sclerotized portions lighter; patellae and spinnerets lightest. Carapace and sternum heavily sclerotized with elongate dark tubercles (Fig. 18) that also cross clypeus. Eyes overhanging clypeus and clypeus receding above small chelicerae. Diameter of anterior median eyes more than twice that of posterior medians, one-third their diameter apart, almost touching laterals. Posterior medians slightly oval, more than three (longer) diameters apart, one diameter from laterals. Sternum wider than long. Chelicerae with one double tooth on anterior margin. Entire dorsum of abdomen covered by a shiny shield; venter by a smaller shield and a ring around spinnerets; abdomen of male flattened. Colulus with two setae. It is very possible that the specimen lacks lungs. Total length of male 1.4 mm. Carapace 0.58 mm long, 0.57 mm wide. First patella and tibia, 0.47 mm; second, 0.41 mm; third, 0.39 mm. Fourth femur, 0.57 mm; patella and tibia, 0.52 mm; metatarsus, 0.26 mm; tarsus, 0.30 mm.

Female. Carapace brown, area of anterior median eyes black. Sternum light brown, legs yellow-brown. Abdomen purplish brown, venter lighter; sclerotized areas red-brown. Carapace and sternum with elongate tubercles. Anterior median eyes larger than others, a little less than a diameter apart, their radius from laterals. Posterior median eyes two diameters apart, one diameter from laterals. Dorsum of abdomen with a circular scutum (Fig. 17). Venter with a semi-circular shield anterior around the pedicel, a sclerite on each side of

EXPLANATION OF PLATE 18

Figs. 14-18. *Wirada punctata* Keyserling. 14. Left palpus. 15. Female genitalia, dorsal view. 16. Epigynum. 17. Female. 18. Male.

Figs. 19-26. *W. towarensis* Simon. 19. Male palpus, cleared. 20. Palpus. 21. Female genitalia, dorsal view. 22. Epigynum. 23. Male left chelicera, posterior view. 24. Male. 25. Male sternum and abdomen. 26. Male. (Abbreviations: E, embolus; M, medium apophysis; R, radix).



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the epigynum, very small sclerites on the side and a broken ring of sclerites around spinnerets. Total length of female 1.5 mm. Carapace, 0.60 mm long, 0.52 mm wide. First patella and tibia, 0.41 mm; second, 0.38 mm; third, 0.35 mm. Fourth femur, 0.45 mm; patella and tibia, 0.44 mm; metatarsus, 0.22 mm; tarsus, 0.28 mm.

Epigynum (Fig. 16) with lip extending behind a slight depression.

The female was not collected with the male and there is some doubt that it belongs to this species. Figures 14 and 18 were prepared from the holotype.

Record. Ecuador. Chimborazo: 48 km SW of Alausi, 2500 m, 14 Feb. 1955, 1 ♀ (E. I. Schlinger, E. S. Ross, CAS).

Wirada towarensis Simon

Figures 19-26

Wirada towarensis Simon, 1894, Histoire Naturelle des Araignées, 1:585, *nomen nudum*; 1895, Ann. Soc. ent. France, 64:148. Male holotype from Colonia Tovar [Tovar, Aragua], Venezuela, 1888 (E. Simon), in the Muséum National d'Histoire Naturelle, Paris, examined.

Description. Sclerotized areas rich dark red-brown; areas between eyes of male yellowish; legs yellowish. Non-sclerotized areas on venter of abdomen whitish. Carapace and sternum of both sexes heavily sclerotized with elongate dark tubercles (Figs. 25, 26), and anterior portion of male carapace raised (Fig. 24). Diameter of anterior median eyes twice that of other eyes. Anterior median eyes of female one-quarter their diameter apart, one-quarter diameter from laterals. Posterior median eyes of female one and one-half diameters apart, one diameter from laterals. Anterior median eyes of male their radius apart, almost touching laterals. Posterior median eyes of male three diameters apart, one and one-half diameters from laterals. Chelicerae with a double tooth on anterior margin (Fig. 23), no teeth posterior. Both sexes with similar sclerotization of abdomen, completely covering dorsum, a smaller shield on venter and a sclerotized ring around spinnerets. The abdomen is flattened (Fig. 24), slightly thicker in female than in male. Male with first leg slightly longer than fourth; female with fourth leg slightly longer than first. Total length of female 1.0 mm. Carapace 0.55 mm long, 0.47 mm wide, 0.30 mm high. First patella and tibia, 0.32 mm; second, 0.31 mm; third, 0.26 mm. Fourth femur, 0.35 mm; patella and tibia, 0.39 mm; metatarsus, 0.18 mm; tarsus, 0.23 mm. Total length of male 1.0 mm. Carapace 0.47 mm long, 0.45 mm wide, 0.35 mm high in eye region. First femur, 0.39 mm; patella and tibia, 0.39 mm; metatarsus, 0.22 mm; tarsus, 0.27 mm. Second patella and tibia, 0.32 mm; third, 0.29 mm; fourth, 0.39 mm.

Record. Venezuela. Aragua: Tovar, 1 ♀ with ♂ holotype, 1888 (E. Simon, MNHN).

Craspedisia Simon

Craspedisia Simon, 1894, *Histoire Naturelle des Araignées*, 1:580. Type species by original designation and monotypy: *Umfila cornuta* Keyserling.

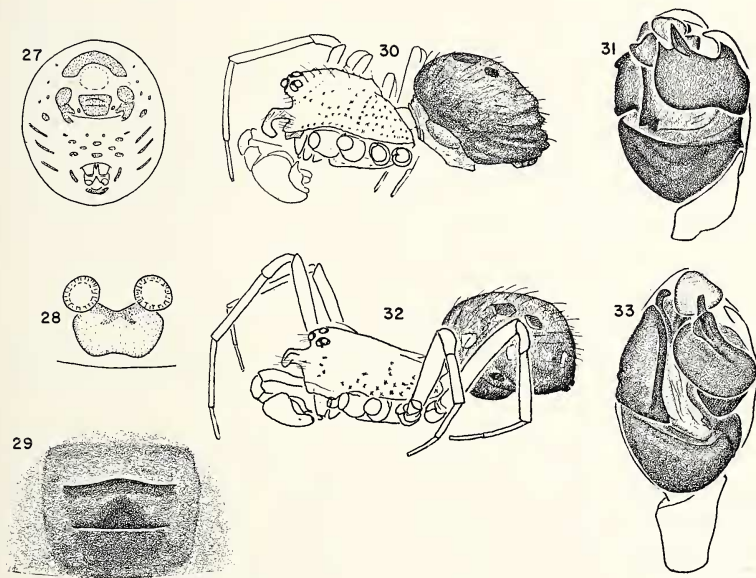
Carapace of female as in *Steatoda*, that of male with a projection on clypeus (Figs. 30, 32). Posterior extension of carapace covering pedicel. Chelicerae with a tooth on anterior margin. Abdomen suboval with a broken sclerotized ring around pedicel in both sexes; some sclerotized spots on venter. Colulus large.

The clypeal projection separates males from *Steatoda* and *Crustulina*. (Levi and Levi, 1962).

Craspedisia cornuta (Keyserling)

Figures 27-31

Umfila cornuta Keyserling, 1891, *Die Spinnen Amerikas*, *Brasilianische Spinnen*, 3:222, pl. 8, fig. 163, ♂. Male holotype from Neu Freiburg



Figs. 27-31. *Craspedisia cornuta* (Keyserling). 27. Female abdomen, ventral view. 28. Female genitalia, dorsal view. 29. Epigynum. 30. Male. 31. Left palpus.

Figs. 32-33. *C. spatulata* Bryant. 32. Male. 33. Palpus.

[Nova Friburgo, Est. Rio de Janeiro, Brazil], in the British Museum Natural History, examined. — Göldi, 1892, Mitt. Osterlande, neue Folge, 5: 233.

Craspedisia cornuta, -Simon, 1894, Histoire Naturelle des Araignées, 1: 580, fig. 587, ♂.

Description. Carapace, sternum orange; legs brown. Abdomen with dorsum black and venter white with a broad dark stripe between genital groove and spinnerets. Carapace of male punctate on sides (Fig. 30). Abdomen of male with four brown sclerotized spots on dorsum. Abdomen of female with scattered sclerotized spots on venter (Fig. 27). Eyes subequal in size. Anterior eyes one-quarter their diameter apart. Posterior median eyes one diameter apart, three-quarters diameter from laterals. Eyes of male smaller and slightly farther apart; anterior median eyes of males slightly larger than others. Chelicerae with two teeth on anterior margin in female; one fleshy tooth on anterior margin in male. Total length of female 3.1 mm. Carapace, 1.56 mm long, 1.32 mm wide. First patella and tibia, 1.20 mm; second, 1.07 mm; third, 0.98 mm. Fourth femur, 1.30 mm; patella and tibia, 1.40 mm; metarsus, 0.72 mm; tarsus, 0.58 mm. Total length of male, 2.9 mm. Carapace, 1.62 mm long, 1.30 mm wide. First femur, 1.10 mm; patella and tibia, 1.23 mm; metatarsus, 0.77 mm; tarsus, 0.57 mm. Second patella and tibia, 1.17 mm; third, 0.94 mm; fourth, 1.22 mm.

Records. *Brazil.* *Est. Rio de Janeiro:* Teresópolis, 900-1000 m (H. Sick, AMNH). *São Paulo:* Jabaquara, Cidade São Paulo, 700-800 m (H. Sick, AMNH). *Santa Catarina:* Nova Teutonia, 27° 11' S, 52° 23' W (F. Plaumann, SMF).

Craspedisia spatulata Bryant

Figures 32-33

Craspedisia spatulata Bryant, 1948, Bull. Mus. Comp. Zool., 100: 373, figs. 47, 48 ♂. Male holotype from rain forest near Valle Nuevo, [near Constanza], Cordillera Central, 1800 m elev., Dominican Republic, in the Museum of Comparative Zoology, examined.

Description. Carapace, sternum, legs red-brown. Abdomen black, dorsum with three large white spots on the anterior, one on each side and a pair towards the posterior; sclerotized spots brown. Second specimen with two rows of three white spots and one median posterior spot. Anterior median eyes slightly larger than others, half their radius apart and a radius from laterals. Posterior median eyes one and one-third diameters apart and the same distance from laterals. Chelicerae with a fleshy tooth on anterior margin, none posterior. Carapace with some tubercles on sides. Sternum with some tubercles.

Tarsal comb indistinct. Abdomen with four dorsal sclerotized spots, the anterior pair the largest; venter almost two-thirds covered by epigastric shield. Total length of holotype, 2.2 mm. Carapace, 1.36 mm long, 0.94 mm wide. First femur, 0.95 mm; patella and tibia, 1.04 mm; metatarsus, 0.59 mm; tarsus, 0.43 mm. Second patella and tibia, 0.95 mm; third, 0.78 mm; fourth, 1.04 mm.

Record. Dominican Republic: Loma Rucilla Mountains, 1500-2400 m., Cordillera Central, ♂ paratype (P. J. Darlington).

REFERENCE CITED

LEVI, H. W. AND L. R. LEVI

1962. The genera of the spider family Theridiidae. Bull. Mus. Comp. Zool. 127(1): 1-71.